



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2

290 BROADWAY

NEW YORK, NY 10007-1866

SEP 06 2016

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Article Number: 7016 0910 0000 4441 5844

Mr. Charles Eastman
CTS Dairy, LLC
10798 NYS Route 193
Ellisburg, New York 13636

RE: Request for Information (“RFI”) Pursuant to Section 308 of the Clean Water Act
CTS Dairy, LLC Concentrated Animal Feeding Operation (NYA000253)
Docket No. CWA-IR-16-031

Dear Mr. Eastman:

The United States Environmental Protection Agency (“EPA”) is charged with the protection of human health and the environment under the Clean Water Act (“CWA” or “Act”), 33 U.S.C. §§ 1251 et seq. Section 308(a) of the CWA, 33 U.S.C. § 1318(a), provides that whenever it is necessary to carry out the objectives of the CWA, including determining whether or not a person/agency is in violation of Section 301 of the CWA, 33 U.S.C. § 1311, the EPA shall require the submission of any information reasonably necessary to make such a determination. Under the authority of Section 308 of the CWA, the EPA may require the submission of information necessary to assess the compliance status of any facility and its related appurtenances.

CTS Dairy, LLC is hereby required, pursuant to Section 308(a) of the Clean Water Act, 33 U.S.C. § 1318(a), to submit to the EPA documentation with accompanying photographs of the following no later than deadlines specified:

1. **No later than thirty (30) calendar days of receipt of this RFI**, submit documentation with accompanying photographs of the measures taken to address each of the Potential Violations and Areas of Concern specified in the enclosed Inspection Report.
2. **No later than thirty (30) calendar days of receipt of this RFI**, submit a copy of how they are accounted for in CTS Dairy, LLC’s Nutrient Management Plan.

All information required to be submitted by this Request for Information shall be sent by certified mail or its equivalent to the following address:

Douglas McKenna, Chief
Water Compliance Branch
Division of Enforcement and Compliance Assistance
290 Broadway, 20th Floor
New York, NY 10007-1866

Any documents to be submitted by CTS Dairy, LLC must be sent by certified mail or its equivalent and shall be signed by an authorized representative of the respective entity (see 40 C.F.R. § 122.22), and shall include the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitted false information, including the possibility of fine and imprisonment for knowing violations.”

Failure to provide the required information may subject the facility to civil/criminal penalties pursuant to Section 309 of the CWA. Failure to comply with the RFI shall also subject the facility to ineligibility for participation in work associated with Federal contracts, grants or loans.

Enclosed is a copy of the inspection report detailing the EPA’s findings from its July 26, 2016 inspection at CTS Dairy, LLC.

If you have any questions regarding this Request for Information or the enclosed Inspection Report, please feel free to contact Christy Arvizu of my staff via phone at (212) 637-3961 or via email at arvizu.christy@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'J. Modigliani', with a stylized flourish at the end.

Justine Modigliani, P.E., Chief
Compliance Section

Enclosures

cc: Joseph DiMura, P.E, Director, Bureau of Water Compliance Programs, NYSDEC
Tara Blum, Regional Water Engineer, NYSDEC Region 6



United States Environmental Protection Agency
Washington, D.C. 20460

Water Compliance Inspection Report

Section A: National Data System Coding (i.e., PCS)

Transaction Code	NPDES	yr/mo/day	Inspection Type	Inspector	Fac Type
1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/> 13 <input type="checkbox"/> 14 <input type="checkbox"/> 15 <input type="checkbox"/> 16 <input type="checkbox"/> 17 <input type="checkbox"/> 18 <input type="checkbox"/> 19 <input type="checkbox"/> 20 <input type="checkbox"/>					
Remarks					
21 <input type="checkbox"/> 22 <input type="checkbox"/> 23 <input type="checkbox"/> 24 <input type="checkbox"/> 25 <input type="checkbox"/> 26 <input type="checkbox"/> 27 <input type="checkbox"/> 28 <input type="checkbox"/> 29 <input type="checkbox"/> 30 <input type="checkbox"/> 31 <input type="checkbox"/> 32 <input type="checkbox"/> 33 <input type="checkbox"/> 34 <input type="checkbox"/> 35 <input type="checkbox"/> 36 <input type="checkbox"/>					
Inspection Work Days	Facility Self-Monitoring Evaluation Rating	BI	QA	Reserved	
67 <input type="checkbox"/> 68 <input type="checkbox"/> 69 <input type="checkbox"/> 70 <input type="checkbox"/> 71 <input type="checkbox"/> 72 <input type="checkbox"/> 73 <input type="checkbox"/> 74 <input type="checkbox"/> 75 <input type="checkbox"/> 76 <input type="checkbox"/> 77 <input type="checkbox"/> 78 <input type="checkbox"/> 79 <input type="checkbox"/> 80 <input type="checkbox"/>					

Section B: Facility Data

Name and Location of Facility Inspected (For industrial users discharging to POTW, also include POTW name and NPDES permit number) CTS Dairy, LLC 10798 NYS Route 193 Ellisburg, New York 13636	Entry Time/Date 0900; 07/26/2016	Permit Effective Date 07/01/2004
	Exit Time/Date 1330; 07/26/2016	Permit Expiration Date 06/30/2009
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) Charles Eastman Partner/Owner/315.486.1389 Christine Watkins Certified CNMP Planner/Executive Director Jefferson County SWCD/ 315.782.2749	Other Facility Data (e.g., SIC NAICS, and other descriptive information) SIC Code 0291 Lat 43.7381 Long -76.160763	
Name, Address of Responsible Official/Title/Phone and Fax Number Charles Eastman Owner/Partner/315.486.1389 10798 NYS Route 193 Ellisburg, NY 13636	Contacted <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

Section C: Areas Evaluated During Inspection (Check only those areas evaluated)

<input checked="" type="checkbox"/> Permit	<input type="checkbox"/> Self-Monitoring Program	<input type="checkbox"/> Pretreatment	<input type="checkbox"/> MS4
<input checked="" type="checkbox"/> Records/Reports	<input type="checkbox"/> Compliance Schedules	<input type="checkbox"/> Pollution Prevention	
<input checked="" type="checkbox"/> Facility Site Review	<input type="checkbox"/> Laboratory	<input type="checkbox"/> Storm Water	
<input type="checkbox"/> Effluent/Receiving Waters	<input type="checkbox"/> Operations & Maintenance	<input type="checkbox"/> Combined Sewer Overflow	
<input type="checkbox"/> Flow Measurement	<input type="checkbox"/> Sludge Handling/Disposal	<input type="checkbox"/> Sanitary Sewer Overflow	

Section D: Summary of Findings/Comments

(Attach additional sheets of narrative and checklists, including Single Event Violation codes, as necessary)

SEV Codes	SEV Description	See EPA CAFO Compliance Inspection Report
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		

Name(s) and Signature(s) of Inspector(s) Christy Arvizu	Agency/Office/Phone and Fax Numbers US EPA Region 2/DECA-WCB/212.637.3961	Date 8/17/2016
Signature of Management QA Reviewer Justine Modigliani, P.E.	Agency/Office/Phone and Fax Numbers US EPA Region 2/DECA-WCB/212.637.4268	Date 8/31/16

INSTRUCTIONS

Section A: National Data System Coding (i.e., PCS)

Column 1: Transaction Code: Use N, C, or D for New, Change, or Delete. All inspections will be *new* unless there is an error in the data entered.

Columns 3-11: NPDES Permit No. Enter the facility's NPDES permit number - third character in permit number indicates permit type for U=unpermitted, G=general permit, etc.. (Use the Remarks columns to record the State permit number, if necessary.)

Columns 12-17: Inspection Date. Insert the date entry was made into the facility. Use the year/month/day format (e.g., 04/10/01 = October 01, 2004).

Column 18: Inspection Type*. Use one of the codes listed below to describe the type of inspection:

A Performance Audit	U IU Inspection with Pretreatment Audit	! Pretreatment Compliance (Oversight)
B Compliance Biomonitoring	X Toxics Inspection	@ Follow-up (enforcement)
C Compliance Evaluation (non-sampling)	Z Sludge - Biosolids	{ Storm Water-Construction-Sampling
D Diagnostic	\$ Combined Sewer Overflow-Sampling	} Storm Water-Construction-Non-Sampling
F Pretreatment (Follow-up)	# Combined Sewer Overflow-Non-Sampling	: Storm Water-Non-Construction-Sampling
G Pretreatment (Audit)	+ Sanitary Sewer Overflow-Sampling	~ Storm Water-Non-Construction-Non-Sampling
I Industrial User (IU) Inspection	& Sanitary Sewer Overflow-Non-Sampling	< Storm Water-MS4-Sampling
J Complaints	\ CAFO-Sampling	- Storm Water-MS4-Non-Sampling
M Multimedia	= CAFO-Non-Sampling	> Storm Water-MS4-Audit
N Spill	2 IU Sampling Inspection	
O Compliance Evaluation (Oversight)	3 IU Non-Sampling Inspection	
P Pretreatment Compliance Inspection	4 IU Toxics Inspection	
R Reconnaissance	5 IU Sampling Inspection with Pretreatment	
S Compliance Sampling	6 IU Non-Sampling Inspection with Pretreatment	
	7 IU Toxics with Pretreatment	

Column 19: Inspector Code. Use one of the codes listed below to describe the *lead agency* in the inspection.

A — State (Contractor)	O — Other Inspectors, Federal/EPA (Specify in Remarks columns)
B ---- EPA (Contractor)	P — Other Inspectors, State (Specify in Remarks columns)
E — Corps of Engineers	R — EPA Regional Inspector
J — Joint EPA/State Inspectors—EPA Lead	S — State Inspector
L ---- Local Health Department (State)	T — Joint State/EPA Inspectors—State lead
N — NEIC Inspectors	

Column 20: Facility Type. Use one of the codes below to describe the facility.

- 1 — Municipal. Publicly Owned Treatment Works (POTWs) with 1987 Standard Industrial Code (SIC) 4952.
- 2 — Industrial. Other than municipal, agricultural, and Federal facilities.
- 3 — Agricultural. Facilities classified with 1987 SIC 0111 to 0971.
- 4 — Federal. Facilities identified as Federal by the EPA Regional Office.
- 5 — Oil & Gas. Facilities classified with 1987 SIC 1311 to 1389.

Columns 21-66: Remarks. These columns are reserved for remarks at the discretion of the Region.

Columns 67-69: Inspection Work Days. Estimate the total work effort (to the nearest 0.1 work day), up to 99.9 days, that were used to complete the inspection and submit a QA reviewed report of findings. This estimate includes the accumulative effort of all participating inspectors; any effort for laboratory analyses, testing, and remote sensing; and the billed payroll time for travel and pre and post inspection preparation. This estimate does not require detailed documentation.

Column 70: Facility Evaluation Rating. Use information gathered during the inspection (regardless of inspection type) to evaluate the quality of the facility self-monitoring program. Grade the program using a scale of 1 to 5 with a score of 5 being used for very reliable self-monitoring programs, 3 being satisfactory, and 1 being used for very unreliable programs.

Column 71: Biomonitoring Information. Enter D for static testing. Enter F for flow through testing. Enter N for no biomonitoring.

Column 72: Quality Assurance Data Inspection. Enter Q if the inspection was conducted as followup on quality assurance sample results. Enter N otherwise.

Columns 73-80: These columns are reserved for regionally defined information.

Section B: Facility Data

This section is self-explanatory except for "Other Facility Data," which may include new information not in the permit or PCS (e.g., new outfalls, names of receiving waters, new ownership, other updates to the record, SIC/NAICS Codes, Latitude/Longitude).

Section C: Areas Evaluated During Inspection

Check only those areas evaluated by marking the appropriate box. Use Section D and additional sheets as necessary. Support the findings, as necessary, in a brief narrative report. Use the headings given on the report form (e.g., Permit, Records/Reports) when discussing the areas evaluated during the inspection.

Section D: Summary of Findings/Comments

Briefly summarize the inspection findings. This summary should abstract the pertinent inspection findings, not replace the narrative report. Reference a list of attachments, such as completed checklists taken from the NPDES Compliance Inspection Manuals and pretreatment guidance documents, including effluent data when sampling has been done. Use extra sheets as necessary.

*Footnote: In addition to the inspection types listed above under column 18, a state may continue to use the following wet weather and CAFO inspection types until the state is brought into ICIS-NPDES: K: CAFO, V: SSO, Y: CSO, W: Storm Water 9: MS4. States may also use the new wet weather, CAFO and MS4 inspections types shown in column 18 of this form. The EPA regions are required to use the new wet weather, CAFO, and MS4 inspection types for inspections with an inspection date (DTIN) on or after July 1, 2005.

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2, DECA-WCB
20th Floor, 290 Broadway, NY, NY 10007**

CAFO COMPLIANCE INSPECTION REPORT

Inspection Date: July 26, 2016 Inspection Time: 0900 - 1330	Inspector: Christy Arvizu, Environmental Scientist USEPA Region 2, (212) 637-3961
Weather Conditions: Sunny/Partly Cloudy	Temperature (°F): between 72 - 90
Inspection Type: Compliance Evaluation Inspection	
On-Site Representatives: Charles Eastman, Partner/Owner, CTS Dairy, LLC (315) 486-1389	
Other Attendees: Christine Watkins, Certified CNMP Planner, Executive Director Jefferson County Soil and Water Conservation District (315) 782 – 2749; Brian Boyer, Inspector, NYSDEC Region 6, (315) 785 – 2518; Patrick Whalen, Life Scientist, USEPA, Region 2, (212) 637-4290	
CTS Dairy, LLC Site Information:	
Main Farm 10798 NYS Route 193 Ellisburg, New York 13636	Machold Road Heifer Facility Machold Road south of intersection with Chamberlain Road Ellisburg, New York 13661
NPDES/ICIS No.: NYA000253 SPDES General Permit No. GP-04-02	
SIC/NAICS Code: 0291/112990 (General Farms)	
Attachments: EPA Form 3560-3; New York State Department of Environmental Conservation, Division of Water, <u>CAFO Facility Inspection Report</u> , Version 1.0 – 3/15/06; USDA NRCS NY Conservation Practice Guideline for Fence (382) (Attachment A); USDA NRCS Technical Note “Agronomy 38” regarding Confinement / Exclusion Fences (Attachment B)	

INTRODUCTION:

On July 26, 2016, the U.S. Environmental Protection Agency (EPA) conducted a Federal lead CAFO compliance inspection at CTS Dairy, LLC (“CTS Dairy” or “Facility”) located in the town of Ellisburg, New York. The EPA inspection team consisted of Christy Arvizu and Patrick Whalen with EPA Region 2’s Division of Enforcement and Compliance Assistance, Water Compliance Branch (DECA-WCB). Brian Boyer of the New York State Department of Environmental Conservation (NYSDEC) Region 6 also accompanied EPA on the inspection. Mr. Charles Eastman represented CTS Dairy. Also present was Christine Watkins of Jefferson County Soil and Water Conservation District (“Jefferson County SWCD”) who has been retained as the Facility’s Nutrient Management Planner.

The inspection was performed to determine the Facility’s compliance with the requirements and limitations of 40 C.F.R. 122.42(e) as well as NYSDEC’s State Pollutant Discharge Elimination System (SPDES) General Permit for Concentrated Animal Feeding Operations (CAFOs) General Permit No. GP-04-02.

INSPECTION PROCEDURE:

The EPA inspection team, led by EPA Inspector Arvizu, arrived at 0900 hours on July 26, 2016 and presented credentials to Mr. Charles Eastman. While on-site, EPA Inspector Arvizu conducted an opening conference with Mr. Charles Eastman and Ms. Christine Watkins and completed the NYSDEC CAFO Inspection Report checklist. EPA

Inspector Arvizu reviewed the Facility's rainfall, manure application, soil and manure analysis records and the Comprehensive Nutrient Management Plan (CNMP). After conducting the records review, EPA Inspector Arvizu conducted the field portion of the inspection and took photographs of potential noncompliance items at the Facility. At the conclusion of the field site visit, a closing conference was held with Mr. Charles Eastman and Ms. Christine Watkins to discuss the preliminary findings and observations of the inspection. EPA Inspector Arvizu concluded the inspection at 1330 hours.

EPA Inspector Arvizu conducted the inspection in accordance with the procedures described in the "Routine Bio-Security Procedures for EPA Personnel Visiting Farms." In addition, EPA Inspector Arvizu provided Mr. Charles Eastman with a copy of EPA's "Small Business Resources Information Sheet" (EPA-300-B-15-001) that was updated in May 2015.

FINDINGS & OBSERVATIONS:

Facility Description:

CTS Dairy is located in Jefferson County. The farmstead consists of two farmsteads (Main Farm and Machold Road Heifer Facility). On December 20, 1999, CTS Dairy applied for coverage under the CAFO General Permit as a medium CAFO under GP-99-01. NYSDEC granted permit coverage on January 4, 2000 (NYA000253). When the CAFO General Permit was re-issued (GP-04-02) on June 24, 2004 with an effective date of July 1, 2004, permit coverage for CTS Dairy was automatically renewed. On July 8, 2004, CTS Dairy submitted a Notice of Intent to expand from a medium CAFO to a large CAFO under GP-04-02. NYSDEC granted permit coverage as a large CAFO on August 7, 2004.

In the event of a discharge, production area runoff would flow to Mud Brook, located to the south of the farmstead.

According to Mr. Eastman, there were approximately 1,300 mature cows and 1,300 young stock (heifers and calves) on-site at the time of the inspection. The Facility is considered to be a large CAFO as it meets or exceeds the large dairy CAFO threshold of 700 mature dairy cows, whether milked or dry.

The main farmstead consists of fifteen barns/structures/areas:

- | | |
|-----------------------|-------------------|
| 1. Old Barn | 6. New Freestall |
| 2. Calf Super Hutches | 7. Silage Bunk |
| 3. Calf Hutches | 8. Tool Shed |
| 4. Heifer Barn | 9. Milking Parlor |
| 5. Original Freestall | |

The Machold Road Heifer Facility consists of a Heifer barn with total confinement and an outdoor concrete pad that is used for manure collection.

There is one manure storage facility in use at the Facility, as well as one concrete silage leachate storage.

1. Clay-lined Earthen Waste Storage Facility (north of New Freestall Barn)
2. Concrete Silage Leachate collection tank

All waste from the milking parlor and Old Barn, Original and New Freestall Barns is directed to the clay lined earthen waste storage facility via gravity flows and pump houses. Leachate is directed to the leachate collection tank, but can also be pumped directly to the clay lined earthen waste storage facility.

Comprehensive Nutrient Management Plan (CNMP):

Section VII.A of the NYSDEC CAFO General Permit requires each CAFO to develop and implement a CNMP in accordance with Natural Resources Conservation Service (NRCS) Conservation Practice Standard NY312, and good agricultural practices, and should include measures necessary to prevent pollutants in runoff. The CNMP for CTS Dairy was prepared by Ms. Watkins of the Jefferson County SWCD and was reviewed on-site.

At the time of the inspection, based on discussion with Mr. Eastman and Ms. Watkins and review of the 2015 Annual Compliance Report (Appendix D), the CNMP had been fully implemented.

Recordkeeping:

As a large CAFO, the Facility is required to maintain and retain copies of the following records for a period of least five years from the date reported in accordance with Section IX.F of the Permit. Therefore, EPA Inspector Arvizu looked at the Facility's records from August 2010 to the present day.

Record	Permit Requirement	Observation
Procedures for cleaning up spills shall be identified and the necessary equipment to implement a clean-up shall be available to personnel	Section VIII.C.xii	Documented in the Facility's Emergency Action Plan
Date, amount of manure, litter, and/or process wastewater exported, name and address of recipient, and provision of representative information on the nutrient content of manure, litter, and/or process wastewater to recipient, if greater than 50 tons are exported annually	Section VIII.C.xiii	N/A – manure is not exported It was noted that the Facility imported whey from Chobani and Great Lakes Cheese in 2015 and 2016. For 2016, whey has only been imported from Great Lakes according to Mr. Eastman. At the time of the inspection, the Facility could not show how the whey imports were accounted for in its CNMP. Ms. Watkins stated that the whey inputs were accounted for and were available in her records. EPA Inspector Arvizu requested a copy for review.
All precipitation events in excess of 0.3 inches	Section IX.K	Precipitation records were only available for January 2015 to present day. Records prior to January 2015 were not available
Annual Compliance Reports	Section IX.L	2009 – 2015 maintained on-site.
Manure analysis for nitrogen and phosphorus	Section IX.M	2016 – manure storage facility and commingled bedded pack (Machold Road Heifer Facility and calf hutches) were sampled in April 2016. Records for prior years were not available on-site at the time of the inspection.
Perform weekly stormwater inspections of all stormwater diversion structures, animal waste storage structures, and devices channeling contaminated stormwater to the wastewater and manure storage and containment structure	Section IX.N.i	Available since January 2016, none prior to January 2016; however, the NYSDEC CAFO permit does not specifically state that records of these inspections are required to be maintained.

Record	Permit Requirement	Observation
Daily water line inspections (including drinking water or cooling water lines)	Section IX.O.i (Production Areas)	Inspections are not being conducted; therefore, no records were available.
Weekly depth marker readings for manure and process wastewater in any open liquid storage structures	Section IX.O.ii (Production Areas)	Weekly depth marker readings were available for the earthen waste storage facility from January 2016 to the present day. No records were available prior to January 2016. There are no records of weekly depth marker readings for the concrete silage leachate collection tank.
Any actions taken to correct deficiencies; deficiencies not corrected within 30 days must be accompanied by an explanation of the factors preventing immediate correction	Section IX.O.iii (Production Areas)	There are no records of actions taken to correct deficiencies when noted.
Handling and disposing of dead animals	Section IX.O.iv (Production Areas)	The Facility states that it utilizes Dairy Comp to track all information related to herd management, including mortalities. EPA did not review the actual mortality data at the time of the inspection. The Facility stated that there were 86 mortalities in 2015, and 41 to date in 2016.
Design of the manure and litter storage structures, including: - Volume of solids accumulation - Approximate number of days worth of storage capacity - Design treatment volume - Calculations used to determine total design volume for storage structures	Section IX.O.v (Production Areas)	Reviewed the Facility's as-builts and Engineer undesignated storage evaluation certification for both storages on-site. - 1998 Earthen Waste Storage (Undesignated Storage Evaluation Certification dated 11/18/2005 from NRCS Area Engineer, Donald Lynch) - 2011 Concrete Silage Leachate Collection Tank (As Built dated 9/19/2011 from NRCS, signed by Donald Lynch)
Overflows from the production area, including date and time and an estimate of the volume	Section IX.O.vi (Production Areas)	Mr. Eastman stated that no overflows occurred at the Facility.
Weather conditions at time of manure application and for 24 hours prior to and following application	Section IX.O.i (Land Application Areas)	Not being maintained as required.
Date(s) of manure application equipment inspection	Section IX.O.ii (Land Application Areas)	The Facility stated that it believed manure application equipment was calibrated approximately two years ago, but did not have records available.

Record	Permit Requirement	Observation
Soil analysis results – “Nutrient planning shall be based on current soil test results developed in accordance with Land Grant University guidance or industry practice if recognized by the Land Grant University. Current soil tests are those that are no older than three years.”	NRCS Conservation Practice Standard NY590 & Section IX.F	Soil test results are summarized in a table with actual results available in a binder. Summary indicated that most fields were tested in 2013. Ms. Watkins stated that samples would be pulled this fall. There were a few fields (HE1 – HE10) that were observed to be last tested more than three years ago (e.g. 11/2009 and 2/2004). Facility representatives stated those fields are generally hay fields which have received manure at least once. Therefore, they will be sampled. In addition, Hoan 1 and Hoan 2 were observed to have last been sampled in 10/2009. Currently, those fields are newly seeded alfalfa fields and will be sampled also according to Ms. Watkins.
Manure application records – “[d]ocumentation of the actual rate at which nutrients were applied. When the actual rates used differ from or exceed the recommended and planned rates, records will indicate the reasons for the differences.”	NRCS Conservation Practice Standard NY590 & Section IX.F	Records were only available for January 2015 – present day

EPA Inspector Arvizu reviewed the following fields and associated manure application recommendation/records for the current crop year (2016):

Field	Recommendation	Application
Sally S (corn silage)	15,000 gallons/acre	10,857 gallons/acre
Ken 1 (corn silage)	15,000 gallons/acre	10,276 gallons/acre
Big State (corn silage)	15,000 gallons/acre	12,488 gallons/acre

Clean Water:

Section VI.A of the CAFO General Permit generally prohibits the discharge of process wastewater from CAFOs to waters of the State. Section VII.A of the NYSDEC CAFO General Permit states that CNMPs are required to be prepared in accordance with “NRCS Conservation Practice Standard No. NY312” which requires that clean water be excluded from concentrated waste areas to the fullest extent practical.

Main Farm

Generally, all animals are housed within the barns with limited exposure to precipitation, with the exception of calf hutches located to the east of the Heifer Barn and super hutches located immediately adjacent to and south of the Old Barn at the Main Farm. Feed residue from the super hutch area runs off into a catch basin at the west end of the concrete pad. The catch basin flows to the Old Barn reception pit which is connected to pump house #1 and eventually pumps to the manure storage.



Photo #1 – Calf Super Hutch Area; view looking west

The Facility stated, and EPA Inspector Arvizu observed, that there are French drains on the west side of the Heifer Barn and the south side of the Original Freestall Barn.

Machold Road Heifer Facility

All animals at the Machold Road Heifer Facility are housed within the barn and there is no outside exposure. At the time of the inspection, EPA Inspector Arvizu observed semi-solid manure stored outside on the concrete pad to the west of the barn that would be exposed to precipitation. Run-off from the concrete pad would flow to adjacent fields. EPA Inspector Arvizu observed there are no nearby waters of the United States.



Photo #2 – Machold Road Heifer Facility manure stacking area; view looking south

Silage/Feed/Commodities Storage:

Section VIII.C.xi of the NYSDEC CAFO General Permit states that “[c]ollection, storage, and disposal of liquid and solid waste should be managed in accordance with NRCS standards.” NRCS Conservation Practice Standard No. 312 “Waste Management System” states that “waste” includes polluted runoff such as that from a barnyard or silo, and that all farms with silage will address silage leachate control.” In addition, NRCS Conservation Practice Standard No. 635 “Vegetated Treatment Area” (VTA) specifies general criteria applicable to all vegetative treatment areas as well as additional criteria for treatment of bunk silo leachate. Section X.G of the CAFO General Permit requires the permittee to, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with this permit.

Main Farm

Corn silage and haylage are stored in a bunk silo that encompasses approximately 3 acres, according to Ms. Watkins and Mr. Eastman. The bunk silo is to the east of the Heifer Barn and to the south of the Original Freestall Barn. The bunk silo is graded toward the north. Leachate flows toward two collection points (west and east collection pit) before being pumped to the onsite total silage leachate collection storage from the east collection pit. Leachate in the west collection pit flows via gravity to the east collection pit. The system was designed to be automatic, but the Facility manually pumps leachate when needed. Mr. Eastman also stated that there is a check valve in the line to prevent backflow. According to the as-built (dated 9/19/2011 from NRCS) provided by the Facility for the total silage leachate collection system, the capacity of the bunk silo collection system is 30,000 gallons.

At the time of the inspection, EPA Inspector Arvizu observed that all silage was contained within the bunk and was covered with plastic and secured with tires. In addition, EPA Inspector Arvizu observed very low levels of leachate in the leachate collection pits (west and east) and minor accumulation of solids in the solids separation screens at the east collection pit.

As noted previously, the Facility utilizes a total silage leachate collection storage which is located to the north of the New Freestall Barn. According to the 9/19/2011 As-Built prepared by Donald Lynch, Area Engineer for NRCS, the storage is a concrete storage that was constructed in 2011, has a diameter of 120 feet wide and is 13 feet deep (12 feet with 1 foot freeboard); holds 930,000 gallons of leachate; and was designed for 5 months of storage. Review of the As-Built indicated that there were general recommendations for operation and maintenance and no site specific operation and maintenance plan had been developed for the silage leachate collection system.

When needed, leachate is manually pumped from the east collection pit at the bunk silo. At the time of the inspection, EPA Inspector Arvizu observed the presence of a depth marker in the storage and fencing along the top of the storage. However, warning signs were not present.

Mr. Eastman stated that the level of leachate in the storage was at approximately 5 feet deep. As previously noted, the storage itself is concrete and has significant vegetation growth around the perimeter in certain areas which may impede access to the storage.



Photo #3 – Excessive vegetation around total silage leachate collection storage; view looking west

Machold Road Heifer Facility

Feed is stored in one grain silo with 15 ton capacity with no exposure to precipitation at the Machold Road Heifer Facility.

Waste Storage Facilities and Manure Transfer:

Section VIII.C.xi of the NYSDEC CAFO General Permit states that “[c]ollection, storage, and disposal of liquid and solid waste should be managed in accordance with NRCS standards.” NRCS Conservation Practice Standard No. 313 “Waste Storage Facility” specifies general criteria applicable to all waste storage facilities as well as additional criteria for waste storage ponds. Section VIII.C.viii of the NYSDEC CAFO General Permit states that “[s]olids, sludges, manure or other pollutants removed in the course of treatment or control of wastewater shall be disposed of in a manner such as to prevent pollutants from being discharged to waters of the State.” In addition, Section X.G of the CAFO General Permit requires the permittee to at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with this permit.

Earthen Waste Storage

According to the As-Built and 11/18/2005 Undesigned Storage Evaluation prepared by Donald Lynch, Area Engineer for NRCS, the storage is an earthen storage that was constructed in 1998, measures 150 feet wide by 428 feet long along the bottom and 222 feet wide by 525 feet long by 13 feet deep; holds 7.8 million gallons of manure; and has approximately 4 months of storage.

Mr. Eastman explained that manure at the Main Farm is handled in the following manner:

- Original Freestall Barn is cleaned once a day with a skid steer which pushes manure to the east (toward the center of the barn) to pump house #1, which then pumps to the earthen waste storage
- New Freestall Barn is cleaned three times a day with a skid steer which pushes manure to the center of the barn and manure either goes to pump house #1, which then pumps to the earthen waste storage; or, manure can be pumped directly from the reception pit to manure application trucks / tankers for land application via a pump on the north side of the barn.
- Calf hutches are cleaned out after two months when calves are moved and bedded pack is land applied.

- Old Barn and parlor washwater are directed to pump house #1 which then pumps to the earthen waste storage.

At the time of the inspection, Mr. Eastman stated that the level of manure in the storage was approximately 4 feet. EPA Inspector Arvizu observed a depth marker/max fill marker in the manure storage. In addition, EPA Inspector Arvizu observed that fencing surrounding the storage did not completely surround the storage as three access points were not fenced (south, north, and east). Mr. Eastman explained that the driveway access points were not fenced due to the need for access to the storage by trucks delivering whey to his manure storage. EPA Inspector Arvizu also observed that there were no warning signs indicating the presence of a manure storage.



Photo #4 – Access point from the south, note lack of fencing or gate across the driveway; New and Original Freestall Barns in background



Photo #5 – Access point from the east, adjacent to corn field



Photo #6 – Access point from the north, note lack of fencing or gate across driveway

In addition to lack of complete fencing around the manure storage, EPA Inspector Arvizu observed the following issues:

- Fencing in disrepair on the west side of the storage (wire strands were either missing between sections or bunched up at the bottom of the fence posts)
- Overgrown vegetation on the west side of the storage
- (2) Pine trees growing in the berm on the west side of the storage

Mr. Eastman stated that it was difficult to mow or brush hog the west side of the manure storage due to the slope of the berm in some areas.



Photo #7 – Fencing on west side of the storage; wire strands were missing



Photo #8 – Overgrown vegetation on the west side of the storage; view looking south



Photo #9 – Pine trees growing on the berm along the west side of manure storage; view looking southwest

Machold Road Heifer Facility

There is no manure storage facility at the heifer facility. As previously stated, all bedded pack manure is stacked on a concrete pad to the west of the heifer barn until it is land applied. Mr. Eastman stated that the Heifer Barn is emptied once a week.

At the time of the inspection, EPA Inspector Arvizu observed two distinct piles. One immediately adjacent to the barn and one on the far western edge of the concrete pad. Mr. Eastman stated that the bedded pack manure had been on-site since May and would probably remain on-site until land application in September 2016.

Other wastes:

Section VIII.C.x of the NYSDEC CAFO General Permit requires that dead animals shall be properly disposed of within three (3) days and in a manner to prevent contamination of waters of the State or creation of a public health hazard and “NRCS Conservation Practice Standard No. NY317 (Composting Facility)” states that contaminated runoff from compost facilities should be directed to appropriate storage or treatment facility for further management.

Mortalities at the Facility are handled through rendering. Mortalities are picked up by a renderer (Pine Tree) when needed. Mr. Eastman stated that mortalities are placed by the grain bins near the calf hutch area. EPA Inspector Arvizu noted that this area was not identified on the facility maps.

CONCLUSIONS:**Potential Violations**

1. Section IX.F of the CAFO General Permit requires the permittee to retain copies of all records and reports required by this permit for a period of at least 5 years from the date reported. The following records were not retained as required:
 - a. Section IX.K of the NYSDEC CAFO General Permit specifies that all precipitation events in excess of 0.3 inch shall be measured and recorded in the CNMP. At the time of the inspection, precipitation records were observed to be available for January 2015 to the present day (July 2016). Records for July 2011 to December 2014 were not available.
 - b. Section IX.M of the NYSDEC CAFO General Permit specifies that all large CAFOs must analyze manure at least once annual[ly] for nitrogen and phosphorus content. At the time of the inspection, manure nutrient analysis records were observed to be available for 2016. Records for 2011 - 2015 were not available.
 - c. Section IX.O.i (Production Areas) of the NYSDEC CAFO General Permit specifies that all large CAFOs must inspect water lines, including drinking water or cooling water lines, once per day, and document those inspections. At the time of the inspection, records documenting daily water line inspections were not being maintained.
 - d. Section IX.O.ii (Production Areas) of the NYSDEC CAFO General Permit specifies that all large CAFOs must keep records of weekly depth marker readings for manure and process wastewater in any open liquid storage structures. At the time of the inspection, weekly depth marker readings were observed to be available for the earthen waste storage facility from January 2016 to the present day (July 2016). No records were available from July 2011 to December 2015. In addition, the Facility did not have records of weekly depth marker readings at the silage leachate collection storage.
 - e. Section IX.O.iii (Production Areas) of the NYSDEC CAFO General Permit specifies that all large CAFOs must keep records documenting any actions taken to correct deficiencies. In addition, any deficiencies not corrected within thirty (30) days must be accompanied by an explanation of the factors preventing immediate correction. At the time of the inspection, EPA Inspector Arvizu did not observe a mechanism for the Facility to notate actions taken to correct deficiencies.
 - f. Section IX.O.i (Land Application Areas) of the NYSDEC CAFO General Permit specifies that all large CAFOs must keep records documenting weather conditions at time of application and for 24 hours prior to and following application. At the time of the inspection, the required weather condition records were not being maintained.
 - g. Section IX.O.ii (Land Application Areas) of the NYSDEC CAFO General Permit specifies that all large CAFOs must keep records documenting date(s) of manure application equipment inspection. At

the time of the inspection, there were no records documenting dates of manure application equipment inspection or calibration.

2. Section VII.A of the NYSDEC CAFO General Permit states that CNMPs are required to be prepared in accordance with “NRCS Conservation Practice Standard No. NY312” which requires that waste management systems shall include components necessary to properly manage waste. Necessary components for a complete waste management system include Nutrient Management or “NRCS Conservation Practice Standard NY590.” NRCS NY590, Operation and Maintenance, states “[d]ocumentation of the actual rate at which nutrients were applied. When the actual rates used differ from or exceed the recommended and planned rates, records will indicate the reasons for the differences” In addition, the operation and maintenance section further specifies that records must be maintained for at least 5 years to document plan implementation and maintenance. At the time of the inspection, EPA Inspector Arvizu observed manure application records from January 2015 to the present day (July 2016). Records from July 2011 – December 2014 were not available.

Areas of Concern

1. Section VII.A of the NYSDEC CAFO General Permit states that CNMPs are required to be prepared in accordance with “NRCS Conservation Practice Standard No. NY312” which requires that waste management systems shall include components necessary to properly manage waste. Necessary components for a complete waste management system include Nutrient Management or “NRCS Conservation Practice Standard NY590.” NRCS NY590 states that “nutrient planning shall be based on current soil and tissue (where used as a supplement) test results developed in accordance with Cornell University guidance or industry practice if recognized by Cornell University. Current soil tests are those that are no older than three years.” At the time of the inspection, EPA Inspector Arvizu noted twelve fields (HE1 – HE10, Hoan 1 & Hoan 2) that were last tested more than three years ago (e.g. 2009 and 2004).
2. Section VIII.C.xi of the NYSDEC CAFO General Permit states that “[c]ollection, storage, and disposal of liquid and solid waste should be managed in accordance with NRCS standards.” NRCS Conservation Practice Standard No. 312 “Waste Management System” states that “waste” includes polluted runoff such as that from a barnyard or silo, and that all farms with silage will address silage leachate control.” Section X.G of the CAFO General Permit requires the permittee to, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with this permit. During the inspection, EPA Inspector Arvizu noted that there was no site-specific operation and maintenance plan for the Facility’s silage leachate total collection system. The Facility’s As-Built dated 9/19/2011 indicated that there were general recommendations for operation and maintenance, but nothing site specific had been developed.
3. Section VIII.C.xi of the NYSDEC CAFO General Permit states that “[c]ollection, storage, and disposal of liquid and solid waste should be managed in accordance with NRCS standards.” NRCS Conservation Practice Standard No. 313 “Waste Storage Facility” specifies general criteria applicable to all waste storage facilities as well as additional criteria for waste storage ponds. During the inspection, EPA Inspector Arvizu observed overgrown vegetation along the west side of the manure storage. In addition, EPA Inspector Arvizu observed two pine trees growing along the berm on the west side of the manure storage.
4. During the inspection, EPA Inspector Arvizu observed incomplete fencing around the earthen manure storage as there were three access points that were not gated or fenced. Specifically, the driveway access points (north and south) as well as an access point from the east which appeared to lead to an adjacent corn field were not fenced or gated. As specified in the Safety section of “NRCS Conservation Practice

Standard No. 313 (Waste Storage Facility)", warning signs, fences, ladders, ropes, bars, rails, and other devices must be provided, as appropriate, to ensure the safety of humans and livestock. NRCS NY313 also states that fencing shall be in accordance with NRCS Conservation Practice Standard NY382.

"USDA NRCS NY Conservation Practice Guideline for Fence (382)" (Attachment A) identifies conservation practices and procedures commonly associated with fences to address natural resource concerns and opportunities in New York in Table A of the document. Included among the practices is Conservation Practice 313 (Waste Storage Facilities). The "USDA NRCS NY Conservation Practice Guideline for Fence (382)" also provides guidance on inventory and evaluation, design, installation, check out, reporting and operation and maintenance. Last, but not least, the USDA has also published a Technical Note "Agronomy 38" regarding Confinement / Exclusion Fences (Attachment B). The Technical Note provides useful information regarding the construction of fences in areas where damage to property or livestock, injury or loss of life is possible. It further defines what critical areas are and what the criteria is for confinement fences for critical areas and non-critical areas.

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD**

**FENCE
(Ft.)**

CODE 382

DEFINITION

A constructed barrier to animals or people.

PURPOSE

This practice facilitates the accomplishment of conservation objectives by providing a means to control movement of animals and people, including vehicles.

CONDITIONS WHERE PRACTICE APPLIES

This practice may be applied on any area where management of animal or human movement is needed.

CRITERIA

General Criteria Applicable to All Purposes

Fencing materials, type and design of fence installed will be of a high quality and durability. The type and design of fence installed will meet the management objectives and site challenges. Based on objectives, fences may be permanent, portable, or temporary.

Fences will be positioned to facilitate management requirements. Ingress/egress features such as gates and cattle guards will be planned. The fence design and installation should have the life expectancy appropriate for management objectives and will follow all federal, state and local laws and regulations.

Height, size, spacing and type of materials used will provide the desired control, life expectancy, and management of animals and people of concern. Refer to Tech Note NY - 38 Fence for guidance

Fences will be designed, located, and installed to meet appropriate local wildlife and land management needs and requirements.

CONSIDERATIONS

The fence design and location should consider: topography, soil properties, livestock management, animal safety, livestock trailing, access to water facilities, development of potential grazing systems, human access and safety, landscape aesthetics, erosion problems, soil moisture conditions, flooding potential, stream crossings, and durability of materials. When appropriate, natural barriers should be utilized instead of fencing.

Where applicable, cleared rights-of-way may be established which would facilitate fence construction and maintenance. Avoid clearing of vegetation during the nesting season for migratory birds. Where applicable, fences should be marked to enhance visibility as a safety measure for animals or people.

Fences across gullies, canyons or streams may require special bracing, designs or approaches.

Fence design and location should consider ease of access for construction, repair and maintenance. Fence construction requiring the removal of existing fencing materials should provide for proper disposal to prevent harm to animals, people and equipment.

PLANS AND SPECIFICATIONS

Plans and specifications are to be prepared for all fence types, installations and specific sites. Requirements for applying the practice to achieve all of its intended purposes will be described.

OPERATION AND MAINTENANCE

Regular inspection of fences should be part of an ongoing maintenance program to ensure continuing proper function of the fence. Operation and Maintenance (O&M) includes the following:

Schedule regular inspections, and after storms and other disturbance events.

Maintenance activities:

- Repair or replacement of loose or broken material, gates and other forms of ingress/egress
- Removal of trees/limbs
- Replacement of water gaps as necessary
- Repair of eroded areas as necessary
- Repair or replacement of markers or other safety and control features as required.

REFERENCES

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- Paige, C. 2012. A Landowner's Guide to Fences and Wildlife: Practical Tips to Make Your Fences Wildlife Friendly. Wyoming Land Trust, Pinedale, WY.
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- United States Department of Interior, Bureau of Land Management and United States Department of Agriculture, Forest Service. 1988. Fences. Missoula Technology and Development Center.
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- Vallentine, J.F. 1971. Range development and improvement. Brigham Young University Press.
- [NEW YORK AGRONOMY TECHNICAL NOTE NY 38 FENCE](#) New York FOTG Section I
Technical References and Notes.

November 6, 2014

AGRONOMY 38

Confinement/Exclusion Fence

The attached information will be helpful in the construction of Fences in areas where damage to property or livestock, injury or loss of life is possible. Critical areas include: fences along property lines, near roads, all perimeter fence in pasture, or adjacent to environmentally sensitive and/or hazardous areas. See Table I for the MINIMUM criteria for critical confinement fences.

For non-critical areas are areas where a lower level of confinement or exclusion is acceptable, such as divisional fences in pastures (either permanent or non-permanent) and other light duty fences. See Table II for the MINIMUM criteria for non-critical confinement fences.

CRITICAL CONFINEMENT/EXCLUSION FENCE

TABLE I: Critical Confinement/Exclusion Fences
Minimum Height and Strand Spacing for Permanent Fence Types

	<u>Non-Electric High Tensile Smooth Wire</u>	<u>Woven Wire</u>	<u>Barbed Wire</u>	<u>Wooden Board</u>	<u>Electric High Tensile Smooth Wire</u>
Goats, Kids, Sheep, Lambs, Alpaca, Llama	Minimum 7 strands, spaced at 4, 10, 16, 22, 28, 34 and 40 inches above the ground	5 horizontal woven wires placed a minimum of 40 inches high, plus one additional wire (either barbed or electrified smooth) no more than 3 inches above the top of the woven wire	Minimum of 4 strands, spaced at 10, 16, 22 and 36 inches above the ground	Not recommended	Minimum 5 strands (3 electrified) – spaced at 6, 12, 20, 28 and 36 inches above the ground
Hogs	Not recommended	5 horizontal woven wires placed a minimum of 35 inches high, plus one additional wire (either barbed or electrified smooth) at the bottom.	Not recommended	Not recommended	Minimum 5 strands with 2 electrified – spaced at 6, 12, 20, 28 and 36 inches above the ground
Humans	Minimum 5 strands, spaced at 10, 20, 30, 40 and 50 inches above the ground	5 horizontal wires placed a minimum of 48 inches high	Minimum of 5 strands, spaced at 6, 12, 20, 28 and 36 inches above the ground	Not recommended	Minimum 4 strands (2 electric) spaced at 10, 22, 34, and 46 inches above the ground
Horses and Foals	Horses Only Minimum 4 strands, spaced at 10, 22, 34, and 46 inches above the ground Horses w/foals Minimum 5 strands, spaced at 10, 20, 30, 40 and 50 inches above the ground	5 horizontal woven wires placed a minimum of 48 inches high, plus at least one additional electrified smooth wire no more than 3 inches above the top of the woven wire	Not recommended	Minimum of 3 and a maximum of 4 boards. Boards spaced on 16 in centers, bottom board @ 16" above the ground 3 board fence – top board @ 48" above the ground 4 board fence – top board @ 64" above the ground	Horses only (no foals) Minimum of 3 strands, all electrified, spaced at 30, 40 and 50 inches above the ground With Foals Minimum of 5 strands, all electrified, spaced at 10, 20, 30, 40 and 50 inches above the ground
Beef Steers, Cows and Calves	Minimum 5 strands, spaced at 10, 20, 30, 40 and 50 inches above the ground	5 horizontal woven wires placed a minimum of 48 inches high, plus one additional wire (either barbed or electrified smooth) no more than 3 inches above the top of the woven wire	Minimum of 3 strands, spaced at 10 to 17, 20 to 27 and 32 to 38 inches above the ground	Minimum of 3 and a maximum of 4 boards. Boards spaced on 16 in centers, bottom board @ 16" above the ground 3 board fence – top board @ 48" above the ground 4 board fence – top board @ 64" above the ground	Minimum of 3 strands (all electrified), spaced at 18, 30 and 42 inches above the ground Or a minimum of 4 strands (only 2 electrified), spaced at 10, 22, 34 and 46 inches above the ground
Dairy Cows and Heifers	Minimum 5 strands, spaced at 10, 20, 30, 40 and 50 inches above the ground	5 horizontal woven wires placed a minimum of 48 inches high, plus one additional wire (either barbed or electrified smooth) no more than 3 inches above the top of the woven wire	Minimum of 3 strands, spaced at 10 to 17, 20 to 27 and 32 to 38 inches above the ground	Minimum of 3 and a maximum of 4 boards. Boards spaced on 16 in centers, bottom board @ 16" above the ground 3 board fence – top board @ 48" above the ground 4 board fence – top board @ 64" above the ground	Dairy Cows only - Minimum 2 strands (2 electrified), spaced at 20 and 34 inches above the ground With Heifers – Minimum of 3 strands (all electrified), spaced at 18, 30 and 42 inches above the ground

Additional Criteria for Non-Critical Areas

Table II – Non Critical Confinement Fences		
<u>Type of Livestock</u>	<u>ELECTRIC Number of Strands</u>	<u>NON ELECTRIC Number of Strands</u>
Mature Horses, Beef and Cows	Minimum 1 strand	Minimum 3 strands/boards or woven
Horses with Foals, Heifers and Cows with Calves	Minimum 2 strands	Minimum 4 strands/boards or woven
Hogs	Minimum 2 strands	Woven
Goats and Kids, Sheep and Lambs, Alpaca, Llama	Minimum 3 strands	Minimum 4 strands/boards or woven

Table II Note: Electric fence materials for non-critical confinement may consist of high tensile smooth wire, electro plastic twine (polywire), electrified ribbon, or other materials as specified by the manufacturer.



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INSPECTOR FOR THE PERMITTEE

Facility Name: CTS Dairy LLC

SPDES: NYA000253

Date: 7/26/2016

I. INSPECTION INFORMATION

Purpose of Inspection (Check any appropriate box): <input type="checkbox"/> Reconnaissance (page 1 only) <input checked="" type="checkbox"/> Comprehensive <input type="checkbox"/> Complaint Response			DEC Region <u>6</u>	Date <u>7/26/16</u>	Time <u>0900</u>
Inspector Name: <u>C. Anzu</u>			Inspector Signature: <u>Christy Anzu</u>		
Owner/Operator Representative: <u>Partner/Owner</u>			Representative Title: <u>Inspector</u>		
Street/Rte. No.: <u>10748 NYS Rt 193</u>		C/T/V: <u>Ellisburg</u>	County: <u>Jefferson</u>	Phone Number: <u>315.486.1385</u>	
Other Inspection Attendees, Affiliations, Phone Numbers: <u>See EPA inspection report</u>					
1. Present Weather Conditions: <u>Sunny / Partly Cloudy; ~72-90°F</u>		2. Weather Previous 24 Hours: <u>Cloudy; trace (1/10")</u>		3. Other Notable Weather Concerns: <u>dry</u>	
4. Permitted Facility <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (If no complete and attach determination worksheet)					
Items			Comments		
5a. Comprehensive Nutrient Management Plan					
5b. Emergency Action Plan					
5c. Monitoring and Reporting					
6. Barnyard Runoff Management					
7. Silage/Feed/Commodities Storage					
8. Waste Storage Facilities and Manure Transfer					
9. Wastewater Treatment Strip					
10. Best Management Practice Implementation					
11. Waste Treatment Systems					
12. COMMENTS/DESCRIPTION					
Overall Facility Rating:					



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Facility Name: CTS Dairy LLC

SPDES: NYA000253

Date: 7/26/16

II. GENERAL INFORMATION

1. Surface water(s) which would receive production area discharges: Mud Brook
2. Watershed(s): (CBP, NYC, Lk Champlain, etc.) Lake Ontario
3. Is there analytical data from the farm well(s) indicating contamination? milk inspector collects ☐ Yes ☐ No N/A
4. Type(s) and numbers of animals currently managed: 1300 mature, 1300 young stock
- 5a. Type of Operation: ☒ Year Round ☐ Seasonal
- 5b. Type of Operation: ☐ Open Lot ☒ Partially Exposed ☐ Fully Roofed
6. Are human wastes being mixed or stored with manure or process wastewater? septic ☐ Yes ☒ No
7. Are additional nutrients imported? (Excl: commercial/chemical fertilizer) Whey ☒ Yes ☐ No
If "Yes", what types and amounts? Great Lakes Cheese - Chobani - 2015 (both)
2016
8. Are nutrients being exported? ☐ Yes ☐ No
9. If the volume of manure, litter, or process wastewater exported exceeds 50 tons annually to any one recipient have the entity, dates, amounts, and address of recipient, been documented in the CNMP? ☐ Yes ☐ No
10. Have all waste recipients been provided with the nutrient content of the manure? ☐ Yes ☐ No N/A
11. Are all waste storage facilities mapped and included in the CNMP? ☒ Yes ☐ No

* requested whey records - NMP accountability, not available on-site at time of insp.



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Facility Name: *CTS Dairy, LLC*

SPDES: *NYA000253*

Date: *7/26/16*

III. COMPREHENSIVE NUTRIENT MANAGEMENT PLAN (CNMP)

1. Has CNMP been completed and is it available onsite? ☒ Yes ☐ No
2. Is the CNMP certification / Appendix B (completed and signed) available onsite? ☒ Yes ☐ No
3. Are the annual compliance reports / Appendix D (completed and signed) available onsite? ☒ Yes ☐ No
going back to 2009
4. Are field data/nutrient application (e.g. Cropware Output) sheets available? ☒ Yes ☐ No *2016; none avail for prior yrs*
5. Are soil test results less than 3 years old? ☒ Yes ☐ No
Generally yes w/ few exceptions (see rpt)
6. Have manure nutrient analyses been completed in the past year? (large) or past 2 years? (medium) ☒ Yes ☐ No
4/2016
7. Are fields with very high P Index scores scheduled to receive or receiving additional manure or P-fertilizer? ☐ Yes ☐ No *NA*
8. Do fields with very high N Index scores have adjusted practice recommendations (e.g. cover crops, timing of application)? ☒ Yes ☐ No
11 fields; avoid spreading / plant cover crop
9. Are field spreading setbacks recorded for wells and streams (perennial and intermittent)? ☒ Yes ☐ No
10. Are manure applications being recorded and tallied by individual field or management unit? ☒ Yes ☐ No
11. Is field spreading in general accord with recommendations? ☒ Yes ☐ No
12. Does the CNMP identify fields to spread during adverse weather conditions? ☒ Yes ☐ No
13. Identify any new animal housing or manure storage structures added since last inspection:
identified on spreadsheet / highlighted; mod-well drained fields, close by flat
NA
14. Are these new structures recorded in the CNMP? ☐ Yes ☐ No *NA*
15. Was the CNMP updated for facility expansion as necessary (e.g. herd or flock increases of $\geq 20\%$)? ☐ Yes ☐ No *NA*
16. Is an emergency action plan available? ☒ Yes ☐ No
17. If "Yes", has it been communicated to employees? (ex: posted in appropriate languages) ☒ Yes ☐ No
not avail in Spanish, but no plan in comm. to employees as they know who
18. Has the CNMP been fully implemented? ☒ Yes ☐ No
to contact acc. to Mr. Eastman.

If "No," provide current status:

Overall Rating:



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Facility Name: CTS Dairy LLC

SPDES: NA000253

Date: 7/26/16

IV. STORMWATER RUNOFF MANAGEMENT

Complete one Section IV. for Each Farmstead (Use Multiple Sheets If Necessary)

Farmstead Name / Identifier: Main Farmstead

1. Is there evidence of runoff discharged directly to a surface water?

☐ Yes ☒ No

If "Yes," describe pipe(s) or channel(s), show location(s) on the map, and indicate if contaminated or potentially contaminated:

2. Farmstead Runoff Management System Includes: ☐ Runoff to Waste Storage ☐ Solids Sedimentation System

☐ Wastewater Treatment Strip

☐ Direct Flows to Remote Field

☒ Other French drain - Half Barn Original FS

3. Does clean water come into contact with the production area?

☒ Yes ☐ No

4. Do roof drains segregate clean rainwater from contaminated runoff? Half Barn

☒ Yes ☐ No

5. Does a watercourse flow through the production area?

☐ Yes ☒ No

6. If "Yes", have livestock been completely fenced out of production area watercourses?

☐ Yes ☐ No N/A

7. Describe any deficiencies (e.g. operation and maintenance) and the various stages of implementation:

Overall Rating:

V. OTHER WASTES

1. Are milking center wastes co-disposed with manure?

☒ Yes ☐ No

2. If "No", describe the method or system for disposal/treatment:

3. Are procedures for handling and disposal of dead animals sufficient?

☒ Yes ☐ No

Rendering (Pine Tree)

4. How is the spoiled silage/feed/commodities handled?

5. Describe any deficiencies and the various stages of implementation:

Overall Rating:



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Facility Name: CTS Dairy LLC

SPDES: DYA000253

Date: 7/26/16

IV. STORMWATER RUNOFF MANAGEMENT

Complete one Section IV. for Each Farmstead (Use Multiple Sheets If Necessary)

Farmstead Name / Identifier: Machold Road Herfer Facility

1. Is there evidence of runoff discharged directly to a surface water?

☐ Yes ☒ No

If "Yes," describe pipe(s) or channel(s), show location(s) on the map, and indicate if contaminated or potentially contaminated:

2. Farmstead Runoff Management System Includes: ☐ Runoff to Waste Storage

☐ Solids Sedimentation System

☐ Wastewater Treatment Strip

☒ Direct Flows to Remote Field

☐ Other

3. Does clean water come into contact with the production area?

☒ Yes ☐ No

4. Do roof drains segregate clean rainwater from contaminated runoff?

☐ Yes ☒ No

5. Does a watercourse flow through the production area?

☐ Yes ☒ No

6. If "Yes", have livestock been completely fenced out of production area watercourses?

☐ Yes ☐ No N/A

7. Describe any deficiencies (e.g. operation and maintenance) and the various stages of implementation:

Overall Rating:

V. OTHER WASTES

1. Are milking center wastes co-disposed with manure?

☐ Yes ☐ No

2. If "No", describe the method or system for disposal/treatment:

3. Are procedures for handling and disposal of dead animals sufficient?

☐ Yes ☐ No

4. How is the spoiled silage/feed/commodities handled?

5. Describe any deficiencies and the various stages of implementation:

Overall Rating:



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Facility Name: *CTS Dairy LLC*

SPDES: *NA000253*

Date: *7/26/16*

VI. SILAGE/FEED/COMMODITIES STORAGE

Complete Section VI. for Each Silage/Feed/Commodities Storage Area (Use Multiple Sheets If Necessary)

Storage Area Name / Identifier: *Main Farmstead*

1. Describe the material(s), method(s) and approximate storage capacity:

3 acres - corn silage, haylage

2. Are adequate measures taken to exclude precipitation/groundwater?

☒ Yes ☐ No

3. If "No", describe:

4. Leachate/Runoff Management includes:

☐ Runoff to Waste Storage

☐ Solids Separation System

☒ High/Low Flow Separator

☐ Wastewater Treatment Strip

☐ Direct Flows to Field

☒ Other *Total collection
Dunk coll. system ~ 30,000 gal*

5. Are Ag Bags being placed such that the leachate runoff could affect water quality? *N/A*

☐ Yes ☒ No *by*

6. If "Yes", is an appropriate leachate control system in place? *N/A*

☐ Yes ☒ No *concrete
steering*

Overall Rating:

VII. MONITORING AND REPORTING

1. Is a rain gage maintained onsite?

☒ Yes ☐ No

2. If "Yes", have all precipitation events in excess of 0.3 inch been measured and recorded?

☒ Yes ☐ No

3. Does the permittee retain copies of all records and reports for at least 5 years?

Jan 2015 - present

☐ Yes ☒ No

Note deficiencies found: *see insp. rpt for details*

4. Are records of overflows from production areas, including the date and time and an estimate of the volume available and sufficient? *no overflows*

☐ Yes ☒ No

FOR LARGE BEEF, DAIRY, VEAL CALF, SWINE, AND POULTRY CAFOS:

- see insp. rpt for findings

5. Have weekly inspections of all storm water devices, runoff diversion structures, animal waste storage structures, and devices channeling contaminated storm water to the wastewater and manure storage and containment structure been done and adequately recorded?

☐ Yes ☒ No

6. Are weekly records of the depth marker readings for manure and process wastewater in any open liquid storage structures available and sufficient?

☐ Yes ☒ No

7. Are records of precipitation exceeding 0.3 inch for a period of 24 hours prior to, during, and for 24 hours after land applications available?

☐ Yes ☒ No

Overall Rating:



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Facility Name: CTS Dairy LLC

SPDES: NY1000253

Date: 7/24/14

VIII. WASTE STORAGE FACILITIES and MANURE TRANSFER

Complete Section VIII. for Each Waste Storage Facility (Use Multiple Sheets if Necessary)

Waste Storage Facility Name / Identifier: 1998 Earthen Waste Storage

1. Are "As Builts" documentation of the installation Available and Signed

by a PE or appropriate NRCS Employee?

☐ Yes ☐ No

2. Is there an Undesigned Storage Evaluation Certification Letter Signed

by a PE or appropriate NRCS Employee (If yes attach copy to inspection report)?

☒ Yes ☐ No

3. If Both 1 and 2 are "No", is it scheduled for an evaluation by a PE?

☐ Yes ☐ No N/A

4. What is the date of installation of the waste storage facility? 1998

5. What materials are stored? (e.g. manure, whey, leachate) Manure, whey, milkhouse waste, leachate

6. Construction:

☒ Clay-Lined ☐ Plastic-Lined ☐ Unlined ☐ Steel ☐ Concrete ☐ Other

7. Capacity (gallons): 7.8 million gallons

6. Approximate Dimensions (ex: side slopes, LxWxD)

8. Approximate Storage Period: ~4 months

222'w x 525'l x 13'd

9. Has a permanent depth marker or recorder been installed at the design storage level?(NY313)

☒ Yes ☐ No

10. Is there evidence of the waste storage facility exceeding the design storage volume?

☐ Yes ☒ No

11. Is fencing in place surrounding the storage?(NY313) 3 access pts missing-fencing/gates; see rpt

☒ Yes ☒ No *

12. Are outside embankments covered with properly maintained vegetation to control erosion?(NY313)

☒ Yes ☐ No

(weeds) SOME slopes not mowed due to grade; otherwise mowed/maintained

13. Are trees, rodent holes, cracks, seeps, etc. evident in the embankment area surrounding the wsf?

☒ Yes ☐ No

2 pine trees on west side

14. Does the storage have a written O&M plan and does it appear that it is being followed?

☒ Yes ☐ No

Generally yes; doc. on checklist

15. Describe any deficiencies and the various stages of implementation:

(ex: lack of records, poor maintenance, etc.)

Overall Rating:

If there are Associated Permanent or Semi-Permanent Pipelines:

18. Are they: ☒ Above Ground ☐ Below Ground

19. Are there stand pipes/valves/junctions at or near streams?

☐ Yes ☒ No

20. Do the valves appear to function properly?

☐ Yes ☐ No DN1

21. Is there evidence of leakage in the pipeline(s), pumps, or valves?(NY634)

☐ Yes ☐ No DN1

22. Are there anti-siphon devices in place?

☐ Yes ☐ No DN1

Overall Rating:



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Facility Name: *CTS Dairy, LLC*

SPDES: *NYA000253*

Date: *7/26/16*

VIII. WASTE STORAGE FACILITIES and MANURE TRANSFER

Complete Section VIII. for Each Waste Storage Facility (Use Multiple Sheets if Necessary)

Waste Storage Facility Name / Identifier: *Silage leachate collection tank*

1. Are "As Builts" documentation of the installation Available and Signed

by a PE or appropriate NRCS Employee?

☒ Yes ☐ No

2. Is there an Undesigned Storage Evaluation Certification Letter Signed

by a PE or appropriate NRCS Employee (If yes attach copy to inspection report)?

☐ Yes ☐ No *N/A*

3. If Both 1 and 2 are "No", is it scheduled for an evaluation by a PE?

☐ Yes ☐ No *N/A*

4. What is the date of installation of the waste storage facility? *2011*

5. What materials are stored? (e.g. manure, whey, leachate) *leachate*

6. Construction: ☐ Clay-Lined ☐ Plastic-Lined ☐ Unlined ☐ Steel ☒ Concrete ☐ Other

7. Capacity (gallons): *930,000*

6. Approximate Dimensions (ex: side slopes, LxWxD)

8. Approximate Storage Period: *~5 months* *120' diameter, 13' deep*

9. Has a permanent depth marker or recorder been installed at the design storage level?(NY313)

☒ Yes ☐ No

10. Is there evidence of the waste storage facility exceeding the design storage volume?

☐ Yes ☒ No

11. Is fencing in place surrounding the storage?(NY313) *(top of storage)*

☒ Yes ☐ No

12. Are outside embankments covered with properly maintained vegetation to control erosion?(NY313)

☐ Yes ☐ No

Concrete storage - sig. veg. grown around storage which may impede access
13. Are trees, rodent holes, cracks, seeps, etc. evident in the embankment area surrounding the wsf?

☐ Yes ☐ No

no cracks observed
14. Does the storage have a written O&M plan and does it appear that it is being followed?

☐ Yes ☒ No

15. Describe any deficiencies and the various stages of implementation:
(ex: lack of records, poor maintenance, etc.)

Overall Rating:

If there are Associated Permanent or Semi-Permanent Pipelines:

13. Are they: ☒ Above Ground ☒ Below Ground

19. Are there stand pipes/valves/junctions at or near streams?

☐ Yes ☒ No

20. Do the valves appear to function properly?

☐ Yes ☐ No *DN*

21. Is there evidence of leakage in the pipeline(s), pumps, or valves?(NY634)

☐ Yes ☐ No *DN*

22. Are there anti-siphon devices in place?

☐ Yes ☐ No *DN*

Overall Rating:



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Date: 7/26/16

If there are Associated Tanks/Reception Pits/Hoppers:

22. Have tanks/reception pits/hoppers been sized to contain less than 7 full days' manure production? ☐ Yes ☒ No

23. Is there evidence of leakage in any tanks/reception pits/hoppers?(NY634) ☐ Yes ☐ No

Overall Rating:

IX. WASTEWATER TREATMENT STRIPS

Complete Section IX. for Each Wastewater Treatment Strip (Use Multiple Sheets If Necessary)

Wastewater Treatment Strip Name / Identifier: N/A

Wastewater Source: (ex: bunk silo #4)

1. Was the treatment strip designed by a Technical Service Provider or NRCS employee with appropriate job approval authority? ☐ Yes ☐ No
2. Does the treatment strip finished grade appear not less than 2% and not more than 12%?(NY635) ☐ Yes ☐ No
3. Does the treatment strip lower edge appear to be a minimum of 25 feet from surface waters of the State and the entire strip 100 feet from a well?(NY635) ☐ Yes ☐ No
4. Is there evidence of pollution beyond the filter area? ☐ Yes ☐ No
5. Are excess solids problematic in the filter area? ☐ Yes ☐ No
6. Do all discharges to the treatment strip appear to be uniformly distributed over a level cross-section?(NY635) ☐ Yes ☐ No
7. Is permanent grass-based vegetation present on a uniformly graded strip?(NY635) ☐ Yes ☐ No
8. Are all concentrated wastewaters (low flows) being diverted away from the treatment strip?(NY635) ☐ Yes ☐ No
(i.e. treatment strips should be designed and utilized for the treatment of contaminated runoff from feedlots, barnyards, livestock holding areas, milking center effluents and high flow dilute silage leachate only)
9. Is a kill zone evident in the treatment strip?(NY635) ☐ Yes ☐ No
10. Should further source control be utilized to reduce the volume, frequency, and concentrations of pollutants entering the treatment strip? (Including diversion of clean water up to the peak discharge from a 25yr/24hr storm) ☐ Yes ☐ No
11. Is the treatment strip mowed and harvested periodically?(NY635) ☐ Yes ☐ No
12. Does the treatment strip have a written O&M plan and does it appear that it is being followed? ☐ Yes ☐ No

Overall Rating:



Denise Sheehan
Commissioner

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Facility Name: CTS Dairy, LLC

SPDES: NYA000253

Date: 7/26/16

X. PERMITTEE ACTION(S) REQUIRED / COMMENTS

☐ None noted

☐ Actions required as follows:

Refer to EPA report

ADDITIONAL COMMENTS

Items the facility has accomplished:

Significant observed environmental concerns/risks:

THIS REPORT IS ONLY RELEVANT TO THE ITEMS INSPECTED AND CHECKED